BRUHAT BANGALORE MAHANAGARA PALIKE

BYATARAYANA PURA DIVISION

Name of Work: Improvements to RCC Drains and RCC Culverts at Right Side Roads of 1st Main Road Kuvempu Nagara, and Surrounding area in Ward No.05

ESTIMATE COST :85.00 Lakhs

Executive Engineer,
BYATARAYANAPURA DIVISION,

BRUHATH BENGALORE MAHANAGARA PALIKE

Name of work:Improvements to RCC Drains and RCC Culverts at Right Side Roads of 1st Main Road Kuvempu Nagara, and Surrounding area in Ward No.05

Est .Cost Rs.85.00 Lakhs

Sl. No		Unit	No	Dimension			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
1	KSRRB 300-3. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil invoiving , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3. **(Page No. 143/ Item No. 19.1/ PWD SR 2018-19)**								
	For RCC Drain								
	Kuvempunagar								
	Cross Road 1		2	25.00	1.10	1.00	55.00		
	Cross Road 2		2	108.00	1.10	1.00	237.60		
	Cross Road 3		2	76.00	1.10	1.00	167.20		
	Cross Road 4		2	83.00	1.10	1.00	182.60		
	Cross Road 5		2	28.00	1.10	1.00	61.60		
	For RCC Culvert								
	Cross Road 1		1	6.50	1.50	1.10	10.73		
	Cross Road 2		2	6.40	1.70	1.10	23.94		
	Cross Road 3		1	6.20	1.50	1.10	10.23		
	Cross Road 5		1	5.00	1.70	1.10	9.35		
	For CC Road								
	Cross Road 1		1	24.00	5.20	0.30	37.44		
	Cross Road 2		1	108.00	6.00	0.30	194.40		
	Cross Road 5		1	34.00	3.00	0.30	30.60		
		Cum					**1020.68**	**207.60**	**211893.38**
	Basic Rate	130.00							
	Loading and unloading charges	57.00							
	lead for earth 5 km	12.80							
	Area Weightage 6%	7.80							
	Grand Total	**207.60**							
2	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. **(P.No-222,I No-27.18 pwd 2018-19)**								
	For RCC Drain								
	Cross Road 1		2	25.00	1.10	0.15	8.25		
	Cross Road 2		2	108.00	1.10	0.15	35.64		
	Cross Road 3		2	76.00	1.10	0.15	25.08		
	Cross Road 4		2	83.00	1.10	0.15	27.39		
	Cross Road 5		2	28.00	1.10	0.15	9.24		
	For RCC Culvert								
	Cross Road 1		1	6.50	1.50	0.15	1.46		
	Cross Road 2		2	6.40	1.70	0.15	3.26		
	Cross Road 3		1	6.20	1.50	0.15	1.40		
	Cross Road 5		1	5.00	1.70	0.15	1.28		
	For CC Road								
	Cross Road 1		1	24.00	5.20	0.15	18.72		
	Cross Road 2		1	108.00	6.00	0.15	97.20		
	Cross Road 5		1	34.00	3.00	0.15	15.30		

Sl. No		Unit	No	Dimension			Quantity	Rate in Rs.	Amount in Rs.
				L	B	D			
		Cum					**244.22**	**5509.33**	**1345468.48**
	Basic Rate	5115.00							
	Deduct Cement cost as per SR -18-19	-1079.39	Note:- (220*490.63/100)=1079.39						
	Add Cement cost as per Issue rate	1161.86	Note:- (220*264.06/50)=1161.86						
	Sub Total	**5197.48**							
	Area Weightage 6%	311.85							
	Grand Total	**5509.33**							
3	Providing and laying plain/reinforced cement concrete for side drains **using M20 nominal mix** concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271 pwd 2018-19)								
	For Bottom Raft								
	For RCC Drain								
	Kuvempunagar								
	Cross Road 1		2	25.00	0.90	0.15	6.75		
	Cross Road 2		2	108.00	0.90	0.15	29.16		
	Cross Road 3		2	76.00	0.90	0.15	20.52		
	Cross Road 4		2	83.00	0.90	0.15	22.41		
	Cross Road 5		2	28.00	0.90	0.15	7.56		
	For RCC Culvert								
	Cross Road 1		1	6.50	1.20	0.15	1.17		
	Cross Road 2		2	6.40	1.50	0.15	2.88		
	Cross Road 3		1	6.20	1.20	0.15	1.12		
	Cross Road 5		1	5.00	1.50	0.15	1.13		
	For Wall								
	For RCC Drain								
	Kuvempunagar								
	Cross Road 1		4	25.00	0.15	0.75	11.25		
	Cross Road 2		4	108.00	0.15	0.75	48.60		
	Cross Road 3		4	76.00	0.15	0.75	34.20		
	Cross Road 4		4	83.00	0.15	0.75	37.35		
	Cross Road 5		4	28.00	0.15	0.75	12.60		
	For RCC Culvert								
	Cross Road 1		2	6.50	0.30	0.75	2.93		
	Cross Road 2		4	6.40	0.25	0.75	4.80		
	Cross Road 3		2	6.20	0.30	0.75	2.79		
	Cross Road 5		2	5.00	0.25	0.75	1.88		
	For Ramp								
	Cross Road 1		2	6.50	0.85	0.15	1.66		
	Cross Road 2		4	6.40	0.70	0.15	2.69		
	Cross Road 3		2	6.20	0.75	0.15	1.40		
	Cross Road 5		2	5.00	0.70	0.15	1.05		
		Cum					**255.87**	**7189.42**	**1839567.22**
	Basic Rate	6670.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1471.89	Note:- (300*490.63/100)=1471.89						
	Add Cement cost as per Issue rate	1584.36	Note:- (300*264.06/50)=1584.36						
	Sub Total	**6782.47**							
	Area Weightage 6%	406.95							
	Grand Total	**7189.42**							

Sl. No		Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
4	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.Specification No. KBS 4.6.3 (I No-28.8.2,P No-229 PWD SR 2018-19)								
	Consider 65kg/Cum for drain		1	237.19	65.00		15417.38		
	Consider 90kg/Cum for Culvert		1	18.68	90.00		1681.29		
		Tonne					**17.10**	**72326.98**	**1236695.34**
	Basic Rate	68233.00							
	Area Weightage 6%	4093.98							
	Grand Total	**72326.98**							
5	Providing and fixing **Precast RCC cover slabs of 100 mm thick for drain** in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work, lift charges,curing and concrtee finished surface on both sides etc,and complete as per the directions of Enginner in charges.(Data Rate)								
	For RCC Drain								
	Kuvempunagar								
	Cross Road 1		2	25.00	0.90		45.00		
	Cross Road 2		2	108.00	0.90		194.40		
	Cross Road 3		2	76.00	0.90		136.80		
	Cross Road 4		2	83.00	0.90		149.40		
	Cross Road 5		2	28.00	0.90		50.40		
		Sqm					**576.00**	**2337.00**	**1346112.00**
	Data Rate	**2337.00**							
6	Providing and fixing **Precast RCC slab of 250mm thick for Culverts** made of Plain/Reinforced Cement Concrete design mix M25 with OPC@340kgs,with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates@0.47cum,with superplasticizer@3lts confirming to 189103-1999 Reaffirmed-2008,Open Foundation complete as per Drawing and Technical Specification including cost of all materials, labour,HOM curing,form works,scaffolding and centering complete as per specifications and pointing for ljoints 1:3 cement mortar including form work,lift charges,curing and concrete finished surfaces on both sides etc,complete and as per the directions of Engineer in-Charge. **(Data Rate)**								
	For Culverts								
	Cross Road 1		1	6.50	1.20		7.80		
	Cross Road 2		2	6.40	1.50		19.20		
	Cross Road 3		1	6.20	1.20		7.44		
	Cross Road 5		1	5.00	1.50		7.50		
		Sqm					**41.94**	**5418.00**	**227230.92**
	Data Rate	**5418.00**							
7	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3 **(Page No. 146/ Item No.19.55/ PWD SR 2018-19)**								
	For Asphalt Road								
	Cross Road 1		1	24.00	5.20		124.80		
	Cross Road 2		1	108.00	6.00		648.00		
	Cross Road 5		1	34.00	3.00		102.00		
		Sqm					**874.80**	**95.40**	**83455.92**
	Basic Rate	90.00							
	Area Weightage 6%	5.40							
	Grand Total	**95.40**							
8	KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 **(Page No-147 Item no - 19.64 of KPWD SR 2018-19)**								
	For CC Road								
	Cross Road 1		1	24.00	5.20		124.80		

Sl. No		Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
	Cross Road 2		1	108.00	6.00		648.00		
	Cross Road 5		1	34.00	3.00		102.00		
		Sqm					**874.80**	**6.36**	**5563.73**
	Basic Rate	6.00							
	Area Weightage 6%	0.36							
	Grand Total	**6.36**							
9	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap I basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve thedesired density complete as per specifications. MORTH Specification No. 406 **(Page No-158 Item no - 20.18 of KPWD SR 2018-19).**								
	Cross Road 1		1	24.00	5.20	0.15	18.72		
	Cross Road 2		1	108.00	6.00	0.15	97.20		
	Cross Road 5		1	34.00	3.00	0.15	15.30		
		Cum					**131.22**	**2001.28**	**262607.96**
	Basic Rate	1888.00							
	Area Weightage 6%	113.28							
	Grand Total	**2001.28**							
10	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) **(Page No. 175.tem No.22.6.1,PW,P & IWTD SR 2018-19)**								
	For CC Road								
	Cross Road 1		1	24.00	5.20	0.15	18.72		
	Cross Road 2		1	108.00	6.00	0.15	97.20		
	Cross Road 5		1	34.00	3.00	0.15	15.30		
		Cum					**131.22**	**5354.02**	**702554.75**
	Basic Rate	4916.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1766.27	Note:- (360*490.63/100)=1766.27						
	Add Cement cost as per Issue rate	1901.23	Note:- (360*264.06/50)=1901.23						
	Sub Total	**5050.96**							
	Area Weightage 6%	303.06							
	Grand Total	**5354.02**							
11	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.**(Page No. 178.tem No.22.7,PW,P & IWTD SR 2018-19)**								
	For CC Road								
	Cross Road 1		1	24.60	5.20		127.92		
	Cross Road 2		1	108.00	6.00		648.00		
	Cross Road 5		1	34.00	3.00		102.00		
		Sqm					**877.92**	**72.08**	**63280.47**
	Basic Rate	68.00							
	Area Weightage 6%	4.08							
	Grand Total	**72.08**							
								Total Constrution cost	**7324430.17**
								GST Charges 12%	**878931.62**
								KRIDL Charges 4%	**292977.21**
								Sub Total	**8496338.99**

Sl. No		Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
								Miscellaneous & Rounding Off	3661.01
								Grand Total	8500000.00
Rupees Eighty Five Lakh(s) Only									

Certificate:-

1) This Work Comes Within BBMP Limits.
2) Certified that personaly Inspected the Work Spot.
3) Certified that the Estimate is Prepared Based on CSR of PWD Bangalore Circle 2018-19
4) Estimate is Prepared Making Use of essential itemof work as per site conditions in safest way of Execution in most economical way
5) This work is not include in any other program of work.

Assistant Engineer
Ward No.05

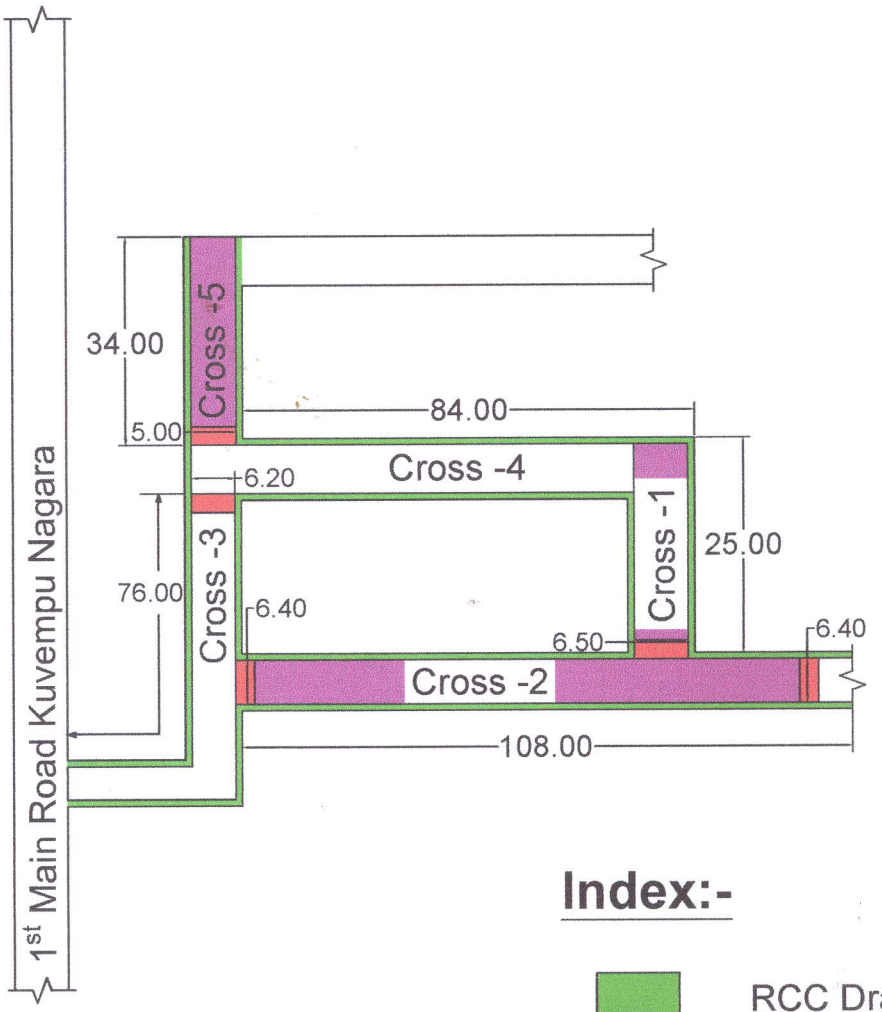
Asst. Executive Engineer,
Byatarayanapura Sub division,

Executive Engineer,
Byatarayanapura Division

ADMINISTRATIVE APPROVAL
Accorded For Rs. 85.00 Lakhs only
Head of A/c P3736
Div. Ref. No. 116/19-20 Date 16-3-2020
AE 16/03
EE(BTP) 16/03

Technically sanctioned for Rs. 85,00,000/-
Rupees EIGHTY FIVE LAKH ONLY
Under P3736
Job Code No. 005-20-000086
Registered as SE(Y)/TS/ 49 / 19-20 sub
to conditions contained in enclosed memo
No. 49 / 19-20 Dated: 16/3/2020
16/03/2020
AE/JE TA SE(Ye...)

Name of Work :- Improvements to RCC Drains and RCC Culverts at Right Side Roads of 1st Main Road Kuvempu Nagara, and Surrounding area in Ward No.05



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- CC Road

Assistant Engineer
Ward No.05

Assistant Executive Engineer
Byatarayanapura Sub division,

All Dimensions are in Meters